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Central Intelligence Agency

Washington, D.C. 20505

DIRECTORATE OF INTELLIGENCE

MEMORANDUM FOR: The Honorable Clayton Yeutter
United States Trade Representative

FROM: [redacted] 25X1
Director of Global Issues

SUBJECT: Western Europe's Airbus Industrie:
Perspective on Programs and Subsidies

[redacted]

1. Attached is the information you requested on Western Europe's Airbus consortium, highlighting the development costs, subsidies, economics, and market projections for two new commercial wide-body aircraft proposals--the A330 and A340. We believe the consortium is close to a launch decision on these designs and that a formal go-ahead could be given in the spring of 1987. Airbus Industrie has completed the final technical definition of the aircraft and currently is making presentations to several airlines with firm price, performance and delivery dates. [redacted] 25X1 25X1

2. We estimate the design and development costs of the A330/A340 will add \$2.7 to \$2.9 billion to the \$7.5 billion already provided by member governments in support of Airbus. While some US financial analysts and industry spokesmen estimate

Attachment:
Western Europe's Airbus Industrie: Perspective on Programs and Subsidies
GI M 86-20280, December 1986 [redacted] 25X1 25X1

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SUBJECT: Western Europe's Airbus Industrie: Perspective on Programs and Subsidies

[redacted] A330/340 launch costs as high as $4.1 billion, we, along with other industry experts, believe the lower figure is more realistic, based on the extensive commonality (and the resultant cost savings) of the two designs. In any event, the economics of the launch are not favorable even at the lower estimate; based on market projections by most US and several West European aviation experts, Airbus Industrie will not recoup its investment. The break-even point would require sales of at least 600 aircraft in the first 10 years of the program. At best the odds are against attaining such sales and at worst, the limited market will have to be shared with another similar design--either the proposed MD-11 or a specialized configuration of an existing Boeing aircraft. We believe that Airbus executives fully appreciate the financial risks, but are determined to increase market share. [redacted]

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3. We will advise you immediately of any significant developments on this matter. In the interim, any questions may be directed to [redacted] of the Industrial Analysis Branch, Office of Global Issues [redacted]

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SUBJECT: Western Europe's Airbus Industrie: Perspective on Programs and Subsidies

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**Western Europe's Airbus Industrie:**
**Perspectives on Programs and Subsidies**

The Airbus Consortium: Sales Are Strong

1. Airbus Industrie, Western Europe's four-nation consortium, is experiencing strong sales as a result of its expanding product line, which increasingly incorporates advanced aerospace technologies. To date, Airbus has accumulated firm orders for some 555 aircraft from 60 airlines. In 1985 Airbus sold 92 aircraft valued at some $3.2 billion--58 A320s and 34 wide-body A300s and A310s--compared with total sales of 35 aircraft in 1984. Most sales this year have been generated by the new 150-seat A320 with its fly-by-wire technology and increased use of advanced materials. Firm sales of the A320 now total some 144, with another 223 on option. The sales have been marked by a growing list of first-time customers: Pan Am which ordered 28 aircraft worth $1.1 billion, including the first US purchase of the A320; Lufthansa, a traditionally US buyer, which purchased up to 50 aircraft valued at $2 billion; and Northwest which recently bought 10 A320s and took 90 of the aircraft on option. [redacted] 25X1

Government Support

2. The initial expansion of the product line from the wide-body A300/A310 to the narrow-body A320 is part of long-term financial support by member governments of the Airbus consortium. We believe subsidies for these three designs currently total some $7.3 to $7.8 billion. [redacted] 25X1

- Design and Development--$3.7-$4.2 billion about evenly divided between the wide-body A300/A310 aircraft and the narrow-body A320.

- Manufacturing--$2.5 billion in plant and equipment.

- Unsold Inventory--$1.1 billion in subsidies to cover the cost of Airbus aircraft built but not sold. Airbus inventories of unsold aircraft have been as high as 35 units. We believe the carrying cost of these inventories is ultimately borne by the member governments. Currently there are only a few "white tails."

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New Programs

3. We believe Airbus Industrie will decide next spring on expanding its "family of aircraft" with a production go-ahead for the new A330/A340 and that the company will offer the designs for delivery in 1992. The A330 is a twin-engine, 310-passenger design, with a range of 4,000 miles and is aimed at replacing many existing trijets like the Lockheed Tristars and older variants of Douglas' DC10s. The four-engine A340 would carry about 260 passengers some 6,000 miles and is targeted at replacing aging DC8s and 707s. This design is strongly backed by Lufthansa. Consortium officials say the new aircraft are logical additions to the Airbus product line and that the designs aim to satisfy many medium to long haul routes that do not require the massive seating capacity of a 747 on a daily or multi-daily basis. Current sales efforts are centered on several West European carriers, most notably Lufthansa and Swissair, and in South Asia, Thai International and Singapore airlines. 25X1

Cost, Commonality and Economics

4. There is a significant difference in the estimates of development costs for the new A330/340 designs. US and some West European aircraft experts believe, and we concur, that the new programs will add another $2.7-2.9 billion of government funding for Airbus, while some US financial analysts, as well as certain US aircraft manufacturers, are estimating $4.1 billion for the programs. We believe the core reason for this difference is that the higher figure does not take fully into account the commonality of the two aircraft. 25X1

5. We estimate a commonality of some 40-50 percent on the A330/340 with the wing offering a major potential for savings. The commonality will also include flight deck and major sections of the fuselage. Overall, we believe the common features could cut the cost of two entirely separate aircraft by at least one-fourth and perhaps as much as one-third. Specifically, the wings for the two aircraft are to be basically the same, with only structural modifications for engine attachment. The cockpits for both aircraft should be very similar with much of the technology based on the concept of the A320. As for fuselages, they are basically derivatives of the A300/A310 fuselage design and fundamentally the same for both the A330/340--differing primarily in length. Other, more subtle design changes, including modifications in the tail assembly and landing gear, will also achieve some commonality and resultant cost savings. 25X1

Size of the Market

6. As with the development costs, projections of the market size for aircraft with the characteristics of the A330/A340 vary widely, ranging from a low of 350-400 aircraft to a high of some 1,000-1,200 aircraft. In general, the low estimates come from US



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aviation experts and the high ones from Airbus officials. We believe the key reason for the wide range in estimates is the interpretation of market sectors: the low side is focusing narrowly on two aircraft, each with its specific passenger layout and range, while the higher estimates are based more broadly on additional high-density passenger/range versions and take into consideration additional derivative designs, such as combi (passenger/cargo) versions. In any event, we believe a combined market for the two designs in a 10-year period is no more than 600-700 aircraft. Even assuming only one competitor in this market sector, we do not believe any manufacturer can earn a satisfactory rate of return. [redacted] 25X1

7. Airbus Industrie based its A330/A340 production cost and investment calculations on a combined total production run of 750 aircraft including several derivative designs. Jean Pierson, the president of Airbus, said last month that the consortium has, for example, had inquiries for a combi passenger/cargo version of the A340. We believe three of the potential launch airlines discussing the A340 are asking for a combi version. Airbus believes there is an initial market requirement for about 100 aircraft. [redacted] 25X1

## Airbus/McDonnell Douglas

8. A potential wild card in the A330/A340 decision continues to be the ongoing negotiations between Airbus and McDonnell Douglas. We believe, however, that formalization of any agreement will be very difficult. Proposals to jointly develop a commercial aircraft for long-range thinly traveled routes are currently dominating the discussions. [redacted] 25X1 While the talks between Airbus and McDonnell Douglas are hampered by a lack of trust stemming from the failure of previous US-European cooperative aircraft projects, the limited market and growing development costs could force both parties to look seriously at joint development. [redacted] 25X1

## Outlook

9. We believe the West European consortium will go forward with the A330/A340 to meet their long held goal of offering a family of aircraft. They now have wide-body, medium-range aircraft and the narrow-body A320. The next logical gap to fill is the long-range sector. Despite arguments that they could not be competitive, Airbus Industrie has continued to launch new aircraft designs to compete with US manufacturers in one market after another. Although not yet profitable, sales in each product line are strong. The commitment to creating and maintaining a competitive aerospace industry has been demonstrated, whatever the cost. [redacted] 25X1



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10. [redacted] Airbus plans another aggressive marketing campaign on the A330/A340 early next year [redacted] We then expect Airbus to begin to consider additional derivatives of existing designs, such as a stretched commercial version of the A320 carrying 170 passengers and perhaps a military ASW design for production in the 1990s. If new propfan, superfan, or unducted fan engines are developed by the mid-1990s, Airbus can be expected to begin to apply them to its products. We believe Airbus' continued successful application of advanced technology, including new materials and fly-by-wire avionics, demonstrates that they will be part of the competitive picture in the 1990s and will continue to capture a significant share of the market. [redacted] 25X1



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